

REMARKS

This application has been reviewed in light of the Office Action dated June 23, 2006, on which the shortened period for response expired on September 23, 2006. Claims 1-20 are now pending in the present application.

THE 35 U.S.C. §103(A) REJECTION OVER U.S. PATENT NO. 6,018,374 (“WROBLESKI”) IN VIEW OF U.S. PATENT NO. 5,680,454 (“MEAD”)

In the Office Action, the Examiner rejected Claims 1, 2-5, 10, and 11 under 35 U.S.C. § 103(a) as being unpatentable (obvious) over U.S. Patent No. 6,018,374 (“Wroblewski”) in view of U.S. Patent No. 5,680,454 (“Mead”). Applicants respectfully request that this rejection be withdrawn because Wroblewski and Mead, alone or in combination, fail to teach, suggest, or provide motivation for each and every claim limitation called for in Claims 1, 2-5, 10, and 11.

Wroblewski describes a system and method for preventing a visible video copy being made of a projected image on a screen. To prevent the copying of a projected image by a video camcorder, a focused or unfocused image in the infrared spectrum is projected on top of the visual image. The infrared image is not visible to viewers, but is visible to the camcorder so that the image appears to be distorted to the camcorder.

Mead discloses a method and system for preventing unauthorized duplication of a projected image by a camcorder. To prevent the copying of a projected image by a video camcorder, a pseudo-random noise sequence is generated. This pseudo-random noise sequence signal is used to randomly vary the frame rate of the projected image at the projector. A human viewer cannot perceive the small variations in frame rate, but a camcorder will record a loss of vertical synchronization and the recorded image is thus unwatchable.

In the present application, Applicants recite in independent Claim 1 a method for distorting a recording of projected images **without varying the frame frequency of the projector**, by imposing an interference on the projected images at a **frame rate frequency** that renders the interference imperceptible to a human viewer; wherein a **difference between the interference frame rate frequency and the recording frame frequency** is perceptible to a human.

In independent Claim 11, the invention is described as a method for operating a motion picture projector **without varying the projector frame frequency**, by determining a recording device frame frequency; and blanking a projected image at a humanly imperceptible blanking frame rate frequency, wherein a difference between the frame frequency and the blanking frame rate frequency is a humanly perceptible frame frequency.

As stated by the Examiner, Wroboski does not teach that the interference or the blanking is at a frame rate frequency. Similarly, Wroboski does not teach that the difference between the interference or blanking frame rate frequency and the recording frame rate frequency is perceptible by a human (viewed with a camcorder). Accordingly, Wrobleski fails to disclose each and every limitation of 1 and 11.

Mead fails to cure the deficiencies of Wrobleski. Mead discloses an apparatus and method in which the frame rate of the projector is varied in a pseudorandom fashion about a nominal frame rate frequency. Thus, a motion picture projector is operated precisely by directly varying the projector frame frequency. Accordingly, Wrobleski in combination with Mead fails to teach, suggest, or provide motivation for each and every limitation of Claims 1 and 11. As such, the Applicants respectfully request that the §103(a) rejection of Claims 1 and 11, and claims dependent therefrom (i.e., Claims 2-5, and 10) be withdrawn.

THE 35 U.S.C. §103(A) REJECTION OVER WROBLESKI IN VIEW OF MEAD AND FURTHER IN VIEW OF U.S. PATENT NO. 6,041,158 (“SATO”)

In the Office Action, the Examiner rejected Claims 7, 8, 12-15, and 18 under 35 U.S.C. § 103(a) as being unpatentable (obvious) over Wrobleski in view of Mead and further in view of U.S. Patent No. 6,041,158 (“Sato”). Applicants respectfully request that this rejection be withdrawn because Wrobleski, Mead, and Sato, alone or in combination, fail to teach, suggest, or provide motivation for each and every claim limitation called for in Claims 7, 8, 12-15, and 18.

Sato discloses a method for preventing an analog color video signal from being satisfactorily copied. Sato provides a copy protection scheme for video recording equipment, in which a copy protection signal is formed of a phase-shifted color burst signal of predetermined duration and is inserted into a predetermined location of the color burst signal of an analog video signal in analog video recording equipment.

Sato fails to cure the deficiencies of Wrobleski and Mead. The device disclosed in Sato is operating directly on **video recording** equipment (see FIG. 4, reference 1 and Col. 6, line 66 to Col. 7, line 3), not equipment for **projecting** a motion picture. Sato does not teach that the difference between the interference or blanking frame rate frequency and the recording frame rate frequency is perceptible by a human (viewed with a camcorder). Sato is introducing a supplementary signal into a color burst signal of the **recording equipment**, which has nothing to do with the frame rate or blanking frequency of a **projected image** on a screen.. Accordingly, the proposed combination of Wrobleski, Mead, and Sato fails to teach, suggest, or provide motivation for each and every element of Claims 1 from which Claims 7 and 8, depend. As

such, the Applicants respectfully request that the §103(a) rejection of Claims 7 and 8 be withdrawn.

In the present application, Applicants recite in Claim 12 a projection system for distorting a recording of projected images which includes an interfering element including a **separator for separating image data into a plurality of colors**; and a controller coupled to the interfering element, wherein the controller, without varying the **projector image** frame frequency, causes the interfering element to impose an alteration on the **projected images** at a humanly imperceptible frame rate.

As the examiner has stated, neither Wrobleski nor Mead nor Sato disclose an interfering element which includes a color separator for separating image data into a plurality of colors. Sato does not teach same. At Col. 6, lines 5-8, Sato discloses that the video signal reproducing device generates a luminance signal Y and a color signal CF. Furthermore, the color signal is the composite color signal, not a color signal separated into different colors. Furthermore, the device disclosed in Sato is operating directly on **video recording equipment**, not equipment for projecting a motion picture which produces a **projected image**. As such, Wrobleski in combination with Mead and Sato fails to teach, suggest, or provide motivation for each and every limitation of Claim 12. As such, the Applicants respectfully request that the §103(a) rejection of Claims 12, and claims dependent therefrom (i.e., Claims 13-15, and 18) be withdrawn.

THE 35 U.S.C. §103(A) REJECTION OVER WROBLESKI, MEAD AND SATO AND FURTHER IN VIEW OF U.S. PATENT NO. 5,394,274 ("KAHN")

In the Office Action, the Examiner rejected Claims 6, 9, 16, 17, 19, and 20 under 35 U.S.C. § 103(a) as being unpatentable (obvious) over Wroblewski in view of Mead in view of Sato and further in view of U.S. Patent No. 5,394,274 ("Kahn"). Applicants respectfully request that this rejection be withdrawn because Wroblewski, Mead, Sato and Kahn, alone or in combination, fail to teach, suggest, or provide motivation for each and every claim limitation called for in Claims 6, 9, 16, 17, 19, and 20.

Kahn discloses a system for preventing the unauthorized copying of audio or video recordings by processing the recorded material so as to identify the protected material in a manner that does not audibly distort the program material, and processing the recorded material by a second methods that produces audible artifacts. The audible artifacts are defined as undesired sounds that are not part of the desired program material. The artifacts are introduced directly into the protected recordings.

Kahn does not teach that the difference between the interference or blanking frame rate frequency and the recording frame rate frequency is perceptible by a human (viewed with a camcorder). Kahn is introducing an **audio signal** into the recording made by **recording equipment**, which has nothing to do with the frame rate or blanking frequency of a **projected video image** on a screen.. Accordingly, the proposed combination of Wroblewski, Mead, Sato, and Kahn fail to teach, suggest, or provide motivation for each and every element of Claim 1 and 11 from which Claims 6, 9, 19, and 20 depend. As such, the Applicants respectfully request that the §103(a) rejection of Claims 6, 9, 19, and 20 be withdrawn.

As the examiner has stated, neither Wrobleski nor Mead nor Sato disclose an interfering element which includes a color separator for separating image data into a plurality of colors. Sato does not teach same. Furthermore, the device disclosed in Mead is introducing **audio artifacts** into the recording made by recording equipment and perceived **audibly by a listener**, not video artifacts **perceived visually** by a viewer. As such, Wrobleski in combination with Mead, Sato, and Kahn fails to teach, suggest, or provide motivation for each and every limitation of Claim 12, from which Claims 16 and 17, depend. As such, the Applicants respectfully request that the §103(a) rejection of Claims 16 and 17 be withdrawn.


In light of the remarks herein, all rejections are believed to have been obviated. Accordingly, Applicants respectfully submit that Claims 1-20 are in condition for allowance.

CONCLUSION

If fees are deemed necessary for this Response to be entered and considered by the Examiner, then the Commissioner is authorized to charge such fee to Deposit Account No. 501358.

Applicants' undersigned patent agent may be reached by telephone at (973) 597-2500. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,



Raymond G. Cappo
Registration No. 53,836
Registered Patent Agent for
Applicants

DOCKET ADMINISTRATOR
LOWENSTEIN SANDLER PC
65 Livingston Avenue
Roseland, NJ 07068